What is claimed is:

1. A process comprising:

(a) dissolving a polymer in a solvent to form a polymer solution, wherein said polymer solution further comprises one or more nucleating agents;

(b) gelling said polymer solution to form a gel-processed polymer;

(c) optionally, removing at least part of said solvent from said gel-processed polymer;

(d) drawing said gel-processed polymer to a draw ratio λ of at least 20.

2. The process according to claim 1, wherein said dissolving is effected at a temperature of at least 50°C.

3. The process according to claim 1, wherein said process comprises cooling said polymer solution to effect said gelling.

4. The process according to claim 1, wherein said process comprises extruding said polymer solution to obtain a shaped gel-processed polymer.

5. The process of claim 4, wherein said shaped gel-processed polymer has the form of a fiber or a film.

6. The process according to claim 1, wherein said process comprises removing at least part of said solvent from said gel-processed polymer prior to said drawing.

7. The process according to claim 1, wherein said process comprises removing essentially all said solvent from said gel-processed polymer prior to said drawing.

8. The process according to claim 1, wherein said process comprises removing at least part of said solvent from said gel-processed polymer during said drawing.

9. The process according to claim 1, wherein said removing includes evaporating and/or extracting said solvent.

10. The process according to claim 1, wherein said polymer is isotactic polypropylene.

11. The process of claim 10, wherein said isotactic polypropylene comprises 0-10 weight percent co-monomer.

12. The process according to claim 1, wherein said polymer has a weight average molecular weight below 750,000 g/mol.

13. The process according to claim 1, wherein said polymer has a weight average molecular weight below 600,000 g/mol.

14. The process according to claim 1, wherein said polymer has a weight average molecular weight of at least 750,000 g/mol.

15. The process according to claim 1, wherein said polymer solution comprises less than 35 weight percent, relative to the total weight of said solvent, of said polymer.

16. The process according to claim 1, wherein said polymer solution comprises less than 15 weight percent, relative to the total weight of said solvent, of said polymer.

17. The process according to claim 1, wherein said polymer solution comprises at least 1 weight percent, relative to the total weight of said solvent, of said polymer.

18. The process according to claim 1, wherein said solvent is a mixture of solvents.

19. The process according to claim 1, wherein said solvent includes decalin.

20. The process according to claim 1, wherein said nucleating agent is selected from the group consisting of 1,3-2,4-di(benzylidene)-D-sorbitol; 1,3-2,4-di(4-tolylidene)-D-sorbitol; 1,3-2,4-(3,4-dimethylbenzylidene)-D-sorbitol; 1,3-2,4-di(4-ethylbenzylidene)-D-sorbitol; tricarballytic acid-type amide compounds; trimesic acid derivatives; 2,2'-methylen-bis-(4,6-di-tert-butylphenyl)phosphate; sodium benzoate; aluminum hydroxy-bis[4-(tert-butyl)benzoate]; rosin/adiebetic acid salts; zinc (II) monoglycerolate; and the di-sodium salt of cis-endo-bicyclo(2.2.1)heptane 2,3-dicarboxylic acid.

21. The process according to claim 1, wherein said one or more nucleating agents are at least partly dissolved in said polymer solution.

22. The process according to claim 1, wherein said polymer solution comprises, relative to the total weight of solvent in said polymer solution, less than 0.25 wt% of said one or more nucleating agents.

23. The process according to claim 1, wherein said polymer solution comprises, relative to the total weight of solvent in said polymer solution, less than 0.1 wt% of said one or more nucleating agents.

24. The process according to claim 1, wherein said polymer solution comprises, relative to the total weight of solvent in said polymer solution, less than 0.05 wt% of said one or more nucleating agents.

25. The process according to claim 1, wherein said draw ratio λ of at least 20 is obtained via a multi-stage drawing process.

26. The process according to claim 1, wherein said draw ratio λ is at least 40.

27. The process according to claim 1, wherein said draw ratio λ is at least 60.

28. A film or fiber obtained by the process according to claim 1.

29. The film or fiber of claim 28, wherein said film or fiber has a Young's modulus of at least 10 GPa.

30. The film or fiber of claim 28, wherein said film or fiber has a Young's modulus of at least 20 GPa.

31. The film or fiber of claim 28, wherein said film or fiber has a Young's modulus of at least 30 GPa.

32. The film or fiber according to claim 28, wherein said film or fiber has a tensile strength of at least 0.5 GPa.

33. The film or fiber according to claim 28, wherein said film or fiber has a tensile strength of at least 0.8 GPa.

34. The film or fiber according to claim 28, wherein said film or fiber has a tensile strength of at least 1.0 GPa.

35. The film or fiber according to claim 28, wherein said film or fiber has a peak melting temperature under constrained conditions of at least 185°C.

36. An article comprising the film or fiber according to claim 28.

37. The article of claim 36, wherein said article is a rope or cable.

38. The article of claim 36, wherein said article is a reinforced thermoplastic, a reinforced thermosetting resin, a reinforced elastomer, or reinforced concrete.

39. The article of claim 36, wherein said article is a pressure vessel, a hose, a power transmission belt, an anti-ballistic product, or a construction material.

40. The article of claim 36, wherein said article is a sail.

41. A process comprising:

(a) dissolving isotactic polypropylene in a solvent to form a polymer solution, wherein

(i) said polymer solution further comprises one or more alpha nucleating agents, and

(ii) the total amount of nucleating agents in said polymer solution is, relative to the total weight of solvent in said polymer solution, less than 0.1 weight percent;

(b) gelling said polymer solution to form a gel-processed polymer;

(c) optionally, removing at least part of said solvent from said gel-processed polymer;

(d) drawing said gel-processed polymer.

42. A process comprising:

(a) dissolving isotactic polypropylene in a solvent to form a polymer solution, wherein

(i) said polymer solution further comprises one or more nucleating agents selected from the group consisting of 1,3-2,4-di(benzylidene)-D-sorbitol; 1,3-2,4-di(4-tolylidene)-D-sorbitol; 1,3-2,4-(3,4-dimethylbenzylidene)-D-sorbitol; 1,3-2,4-di(4-ethylbenzylidene)-D-sorbitol; tricarballytic acid-type amide compounds; trimesic acid derivatives; 2,2'-methylen-bis-(4,6-di-tert-butylphenyl)phosphate; sodium benzoate; aluminum hydroxy-bis[4-(tert-butyl)benzoate]; rosin/adiebetic acid salts; zinc (II) monoglycerolate; and the di-sodium salt of cis-endo-bicyclo(2.2.1)heptane 2,3-dicarboxylic acid; and

(ii) the total amount of nucleating agents in said polymer solution is, relative to the total weight of solvent in said polymer solution, less than 0.1 weight percent;

(b) gelling said polymer solution to form a gel-processed polymer;

(c) optionally, removing at least part of said solvent from said gel-processed polymer;

(d) drawing said gel-processed polymer.

43. The process according to claim 41, wherein said process comprises biaxial drawing.

44. The process according to claim 41, wherein said total amount of nucleating agents is less than 0.05 weight percent.

45. A porous membrane obtained by the process according to claim 41.